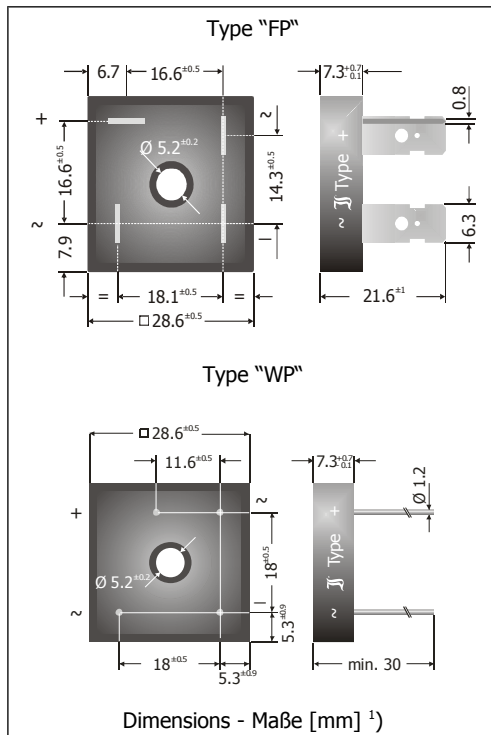


**KBPC10/15/25 00...16 FP/WP**
**Silicon-Bridge-Rectifiers  
Silizium-Brückengleichrichter**

Version 2013-04-12



Nominal current

10 / 15 / 25 A

Nennstrom

Alternating input voltage  
Eingangswechselspannung

35...1000 V

Plastic case with alu bottom  
Plastikgehäuse mit Alu-Boden

Index "P"

Dimensions  
Abmessungen

28.6 x 28.6 x 7.3 [mm]

Weight approx.  
Gewicht ca.

17 g

Compound has classification UL94V-0  
Vergussmasse nach UL94V-0 klassifiziertStandard packaging bulk  
Standard Lieferform lose im Karton

Marking (Example)

Bestempfung (Beispiel)

~  KBPC<sub>10</sub><sub>15</sub>08 +

Recognized Product – Underwriters Laboratories Inc.® File E175067  
Anerkanntes Produkt – Underwriters Laboratories Inc.® Nr. E175067

**Maximum ratings**
**Grenzwerte**

| Type <sup>2)</sup><br>Typ <sup>1)</sup> | Max. alternating input voltage<br>Max. Eingangswechselspannung<br>$V_{VRMS}$ [V] | Repetitive peak reverse voltage<br>Periodische Spitzenspannung<br>$V_{RRM}$ [V] <sup>3)</sup> |
|-----------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| KBPC10/15/2500                          | 35                                                                               | 50                                                                                            |
| KBPC10/15/2501                          | 70                                                                               | 100                                                                                           |
| KBPC10/15/2502                          | 140                                                                              | 200                                                                                           |
| KBPC10/15/2504                          | 280                                                                              | 400                                                                                           |
| KBPC10/15/2506                          | 420                                                                              | 600                                                                                           |
| KBPC10/15/2508                          | 560                                                                              | 800                                                                                           |
| KBPC10/15/2510                          | 700                                                                              | 1000                                                                                          |
| KBPC10/15/2512                          | 800                                                                              | 1200                                                                                          |
| KBPC10/15/2514                          | 900                                                                              | 1400                                                                                          |
| KBPC10/15/2516                          | 1000                                                                             | 1600                                                                                          |

1 Edge at the "+" connector may be bevelled – Die Ecke am "+" Anschluss kann abgeschrägt sein

2 Add index "FP" or "WP", according to connector type – Je nach Anschlussversion ist der Index "FP" oder "WP" zu ergänzen

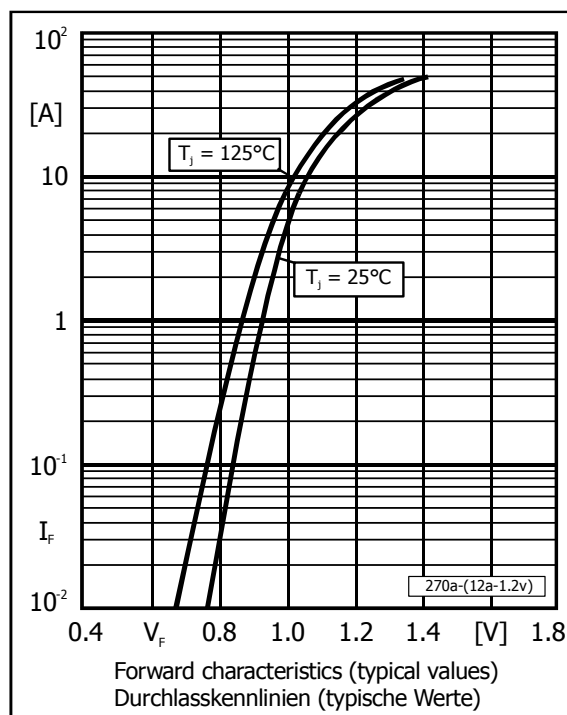
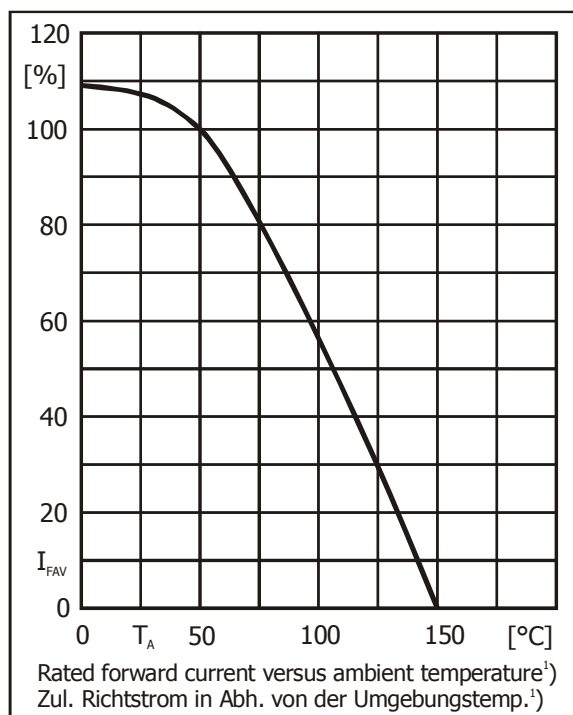
3 Valid per diode – Gültig pro Diode

**Maximum ratings**
**Grenzwerte**

|                                                                                                          |                                                                                                      |                                                          |                                                          |
|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|
| Repetitive peak forward current<br>Periodischer Spitzenstrom                                             | $f > 15 \text{ Hz}$                                                                                  | $I_{FRM}$                                                | $60 \text{ A}^1)$                                        |
| Peak forward surge current<br>50/60 Hz half sine-wave<br>Stoßstrom für eine<br>50/60 Hz Sinus-Halbwellen | KBPC10/15/2500FP/WP ...<br>KBPC10/15/2510FP/WP<br><br>KBPC10/15/2512FP/WP ...<br>KBPC10/15/2516FP/WP | $T_A = 25^\circ\text{C}$<br><br>$T_A = 25^\circ\text{C}$ | $I_{FSM}$<br><br>$I_{FSM}$                               |
| Rating for fusing, $t < 10 \text{ ms}$<br>Grenzlastintegral, $t < 10 \text{ ms}$                         | $T_A = 25^\circ\text{C}$                                                                             | $i^2t$                                                   | $375 \text{ A}^2\text{s}$                                |
| Operating junction temperature – Sperrschichttemperatur<br>Storage temperature – Lagerungstemperatur     |                                                                                                      | $T_j$<br>$T_s$                                           | $-50...+150^\circ\text{C}$<br>$-50...+150^\circ\text{C}$ |

**Characteristics**
**Kennwerte**

|                                                                                                      |                          |                        |                        |                                                         |
|------------------------------------------------------------------------------------------------------|--------------------------|------------------------|------------------------|---------------------------------------------------------|
| Max. current with cooling fin $300 \text{ cm}^2$<br>Dauergrenzstrom mit Kühlblech $300 \text{ cm}^2$ | $T_A = 50^\circ\text{C}$ | R-load<br>C-load       | $I_{FAV}$<br>$I_{FAV}$ | $25 \text{ A}$<br>$20 \text{ A}$                        |
| Forward voltage – Durchlass-Spannung                                                                 | $T_j = 25^\circ\text{C}$ | $I_F = 12.5 \text{ A}$ | $V_F$                  | $< 1.2 \text{ V}^2)$                                    |
| Leakage current – Sperrstrom                                                                         | $T_j = 25^\circ\text{C}$ | $V_R = V_{RRM}$        | $I_R$                  | $< 10 \mu\text{A}$                                      |
| Isolation voltage terminals to case<br>Isolationsspannung Anschlüsse zum Gehäuse                     |                          |                        | $V_{ISO}$              | $> 2500 \text{ V}$                                      |
| Thermal resistance junction to case<br>Wärmewiderstand Sperrschicht – Gehäuse                        |                          |                        | $R_{thC}$              | $< 2.0 \text{ K/W}$                                     |
| Admissible torque for mounting<br>Zulässiges Anzugsdrehmoment                                        |                          | 10-32 UNF<br>M5        |                        | $18 \pm 10\% \text{ lb.in.}$<br>$2 \pm 10\% \text{ Nm}$ |



1 Valid, if the temperature of the case is kept to  $T_C = 120^\circ\text{C}$  – Gültig, wenn die Gehäusetemperatur auf  $T_C = 120^\circ\text{C}$  gehalten wird  
2 Valid per diode – Gültig pro Diode